Clean energy: the EU’s push for renewables and energy efficiency

Energy Efficiency Directive: “We need to be more ambitious.”

Fighting climate change and improving energy security are among the EU’s priorities. Find out how MEPs want to boost energy efficiency and the use of renewable energy.

In 2018, the European Parliament approved legislation to help fight climate change, as well as reduce the EU’s dependency on fossil fuel imports and help households generate their own green energy.

This legislative package is composed of three laws: one on renewable energy, one on energy efficiency and one on a control mechanism.

The laws on renewable energy use and on energy efficiency are currently under revision to help the EU reach new ambitious climate goals set under the European Green Deal in 2021. Boosting the share of renewable energy and improving energy efficiency will also help Europe reduce its dependency on fossil fuel imports that come in large part from Russia.

Discover the latest information on EU measures to boost renewables and energy efficiency

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Increasing the share of renewables

The share of energy consumed from renewable sources has more than doubled in the last years, from about 9.6% in 2004 to 22.1% in 2020. This means that the EU reached its 20% target for 2020.

Under current rules, the share of renewables should be at least 32% by 2030, and this target is being revised up. In September 2022, Parliament demanded an increase to 45%.

Learn more about the share of renewable energy in EU countries.

Improving energy efficiency

Energy efficiency improvements could not only reduce CO2 emissions, but also the EU's annual €330 billion energy import bill. That is why EU lawmakers are working on an update of the 32.5% energy efficiency target for 2030, agreed in 2018. Energy efficiency means using less energy to produce the same result.

New targets, backed by Parliament in September 2022, are at least a 40% reduction in final energy consumption and 42.5% in primary energy consumption. Final energy consumption refers to the energy used by final consumers (such as electricity consumption of households), whereas primary energy consumption represents the total energy demand within a country (for example fuel burned to produce electricity).

One important area for improvement is the heating and cooling of buildings, which accounts for 40% of all the energy consumed in the EU. About 75% of them are energy inefficient.

To address this issue, the Parliament adopted new rules on the energy efficiency of buildings in April 2018. According to the rules, EU countries should prepare national long-term strategies to support the renovation of residential and non-residential buildings. The aim is that by 2050 buildings in the EU hardly use any energy.

In addition, in 2017 Parliament simplified energy labels for home appliances, such as lamps, televisions and vacuum cleaners, to make it easier for consumer to compare their energy efficiency.

Control mechanism

In 2018, MEPs also approved new rules on the so-called governance of the energy union. It is a control mechanism to monitor countries’ progress towards the EU's energy and climate targets.
for 2030 and a cooperation tool to fill the gap in case a member state falls behind.

MEPs will debate and vote on the updates on renewable energy and energy efficiency in September plenary.

More on climate change and the EU

- Reducing carbon emissions: EU targets and measures
- Climate change in Europe: facts and figures

Next steps

Parliament and Council will now start negotiations on the update of the rules on energy efficiency and renewable energy.

This article was originally published in 2018 but has been revised to reflect the more ambitious targets currently being negotiated.

Solar energy could help to fight climate change ©AP Images/European Union-EP

Infographic

Timeline of climate change negotiations
Press release: Parliament backs boost for renewables use and energy savings (14 September 2022)